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FISHING WITH POISON IN AFRICA

During the American Museum Expedition to the Belgian Congo, 1909-1915, we had opportunity to gather a large collection of fish from the Congo River and its northeastern affluents.

It may be interesting to give a short account of one of the most successful methods of fishing used by the natives of the Logo and Bakango tribes of Faradje (Uele District) on the Dungu River, an affluent of the Uele-Ubangi system. At the appointed day in the early morning a crowd of women and children set out with baskets full of leaves of a large bush with white pea-like flowers (*Tephrosia*), which they cultivate in their villages. At a particular rocky place where the river was about 500 yards wide, they selected one of the largest rocks forming a low island. They threw these leaves into the circular erosions, which thus served as mortars. Two or three women over one hole would busily handle the pestles crushing the leaves, keeping time to the songs of the merry crowd. In the meantime a few of the men and boys had, downstream, constructed a slight barrier of branches and green twigs across the shallow riverbed. Now these slowly came up stream with their dugouts, and, with good wishes for success, received the green mush from the holes in large, wide-meshed baskets. Again paddling upward for a few hundred yards,

they made fast their canoes. At this place the stream was partially obstructed by the emerging rocks, and to the passages between, with much stronger current, they carried their nearly full baskets. All at once, they dipped them into the water and stirred the mush rapidly with one hand. Soon the brownish water showed a distinct greenish hue and within less than five minutes fish after fish came to the surface acting as if it had completely lost its power of equilibrium.

Men, women and children armed with spears and arrows, knives and hatchets all had rushed into the water or taken positions on the different rocks, on the lookout for the doomed fish. For about an hour the whole section downstream became the happy and noisy hunting-ground of the natives who either would throw the fish as they were killed, out upon the larger rocks, or carry them along in baskets. When the catch was complete all fish were distributed by the chief among the party, he retaining a few of the larger ones that weighed easily from 10 to 20 lbs. each.

It seemed to us that fish killed with this poison decomposed more rapidly, yet it is certain that they may be consumed without the slightest danger. The fish taken belonged chiefly to the families, Siluridae, Mormyridae, Cyprinidae, Characinidae.

While we were standing on a rock, a boy had thrown out with a painful yell, a small specimen of an electric catfish (*Malapterurus electricus*). To prevent its struggling back into the water, I stepped on it and was greatly surprised to receive through a one-third inch heavy leather sole, a shock that made me withdraw my foot quickly. I pushed the fish into a hole and Mr. Chapin and myself marveled that such a small specimen could store enough electricity to repeat this performance at least ten times through wet soles.

Many tribes do not eat this fish, which has a thick, rather loose, blubber-like skin, but I have heard

from white men that it is excellent eating, after the removal of its electric hide.

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LONG ISLAND FISHES NOTED BY MR. J. G. RAYNOR

Elops saurus. The Big-eyed Herring or Ten-Pounder, is of particular interest to students of evolution and of the past life of the earth, because it is what is often called "a living fossil," that is, a type which has come down from remote ages with very little change in structure. This fish is in fact a little modified representative of a group which flourished far back in the Cretaceous Period of the earth's history. It is also one of the most primitive of all the teeming hosts of Teleost fishes. Its nearest relatives among existing fishes are the Tarpon (*Megalops*) and the Ladyfish (*Albula*).

The American Museum of Natural History has recently received from Mr. John G. Raynor a specimen of this fish taken at Westhampton Beach, Long Island, about October 20, 1914. Others were taken at about the same time. The occurrence of this southern form on Long Island is sufficiently infrequent to be worthy of record; it is said to be common at Woods Hole, Mass., in October.*

Tetrapterus imperator. Mr. Raynor reports a Spearfish taken at Westhampton in the last of June or first part of July, 1890. He verified its identification by examining a figure of the species as well as a mounted Sailfish and a Swordfish model at the museum; and later submitted a very fair photograph of the fish, taken at the time of capture. To judge from the photograph it was eleven or twelve feet in total length. This fish apparently belongs with the Spearfish incursion reported from Woods Hole 1885

* Bull. U. S. Bur. Fish. Vol. 31, pt. 2.